

**Kansas Water Authority Meeting**  
**Conference Call / Zoom**  
**9:00 a.m. – June 23, 2021**  
**Agenda**

<i>Time</i>	<i>Agenda Item</i>	<i>Presenter</i>	<i>KWA Advice</i>	<i>KWA Decision</i>	<i>Page No.</i>
9:00 am	<b>Call to Order/Roll Call</b>	Dawn Buehler	--	--	--
9:05 am	<b>Approval of Meeting Minutes</b>	Dawn Buehler			
	June 9, 2021 Meeting (Hybrid/Virtual)	Dawn Buehler		X	2
9:10 am	<b>PWS Committee Update</b>	John Bailey			
	CY 2022 Water Marketing Rate	Nathan Westrup		X	4
	Water Marketing Application No. 258	Nathan Westrup		X	6
	Water Marketing Application No. 259	Nathan Westrup		X	11
9:25 am	<b>Kansas Water Plan Update</b>	Connie Owen			
	Timeline/Schedule Update	Connie Owen	X		
9:40 am	<b>New Business</b>				
9:45 am	<b>Adjourn</b>				

Upcoming Kansas Water Authority Meetings: August 17, 2021 – Garden City, KS

Join Zoom Meeting

<https://zoom.us/j/96250799194?pwd=YmJVOHdKSVDxNkM0NTEzdWw2VXdTd09>

Meeting ID: 962 5079 9194

Passcode: 385919

## Minutes

### KANSAS WATER AUTHORITY Manhattan, Kansas

June 9, 2021

Hybrid/Zoom

**CALL TO ORDER:** Chair Dawn Buehler called the **June 9, 2021**, Kansas Water Authority conference call to order at **9:02** a.m.

**MEMBERS PRESENT:** Dawn Buehler, Mike Armstrong, John Bailey, Randy Hayzlett, Jeremiah Hobbs, Alan King, Chris Ladwig, Carolyn McGinn, Allen Roth, Jean Steiner, David Stroberg

**MEMBERS ABSENT:** Lynn Goossen, Allan Soetaert

**EX-OFFICIO MEMBERS PRESENT:** Susan Duffy, Lane Letourneau, Brad Loveless, Sara Baer, Leo Henning, Mike Beam, Andrew Lyon, Connie Owen

**EX-OFFICIO MEMBERS ABSENT:** Rolfe Mandel, Dan Devlin, Kayla Savage

#### **APPROVAL OF MINUTES:**

**Motion No. 06-09-01** It was moved by **Mike Armstrong** and seconded by **Allen Roth** to approve the May 18, 2021 Minutes for the Regular Meetings of the Kansas Water Authority as presented. **Motion carried with no dissenting votes.** Information found in meeting materials.

#### **KWA Public Water Supply Committee Update:**

*Water Marketing Rate Setting Discussion/Preview:*

**Nathan Westrup** and **John Bailey** presented.

#### **RAC Membership Drive Update:**

**Matt Unruh** gave an update

#### **Legislative Update:**

*Water Infrastructure Funding – Draft Message to Governor/Legislature*

**Connie Owen** gave an update. No motion was made due to suggested adjustments to the written motion.

#### **Legislative Update:**

*House Water Committee Interim Summer Session Update:*

**Matt Unruh** gave an update

**Vision/Kansas Water Plan Update:**

*Remaining Schedule & Overview of Public Comment Process:*

**Kirk Tjelmeland** gave an update

**Federal Updates:**

**Matt Unruh** gave an update

**U.S. Corps of Engineers Informational Presentation:**

*Reservoir Sediment Management*

**John Shelley** presented

**Federal Cooperative Agreements (USGS)**

*Streamgaging Network, Kansas River Water Quality Monitoring, Neosho River Sediment Monitoring  
Monitoring on Republican River at Clay Center, HABs in Rivers Study*

**Motion No. 06-09-02**

It was moved by **Mike Armstrong** and seconded by **Jean Steiner** for the KWA to give approval to the Director to enter into agreements with the USGS for the Streamgaging Network, KS River Water Quality Monitoring, Neosho River Sediment Monitoring, Monitoring of the Republican River at Clay Center above Milford Lake, and HABs in Rivers Study. **Motion carried with no dissenting votes.** Information found in meeting materials.

**KWA Member Discussion:**

*Ex-Officio Roundtable Introductions*

All present KWA ex-officio members gave a presentation about themselves and their background.

**Agency Updates:**

**Susan Duff** gave an update for the Kansas Corporation Commission.

**Brad Loveless** gave an update for KDWP&T.

**Director's Report:**

**Connie Owen** gave a drought update.

**ADJOURNMENT**

The KWA adjourned at 12:12 pm.

# MEMO



DATE: June 15, 2021  
TO: Kansas Water Authority  
FROM: John Bailey, Chair, Public Water Supply Committee  
Nathan Westrup  
RE: Public Water Supply Committee Update

900 SW Jackson Suite 404  
Topeka, KS 66612  
Phone: (785) 296-3185  
Fax: (785) 296-0878  
www.kwo.org

## Action Items:

- Set the CY 2022 Water Marketing Variable Rate
- Consider authorizing the Director to begin contract negotiations pursuant to Water Marketing Application No. 258 (City of Independence)
- Consider authorizing the Director to begin contract negotiations pursuant to Water Marketing Application No. 259 (City of Hillsboro)

The Public Water Supply Committee met on June 14, 2021 to set the water marketing rate for calendar year 2022. The water marketing rate is determined based on the financial needs of the program and projected sale of water. The State Water Plan Storage Act requires the KWA take action by July 15th on the rate to be applied the following calendar year.

## Water Marketing Program Variable Rate for Calendar Year 2022

At the meeting held on June 14, 2021, the PWS Committee acted to recommend that the KWA set the Calendar Year (CY) 2022 water marketing variable rate at \$0.454/1000 gallons, which is a 4.2% increase from the CY 2020 rate. The 1.8 cent increase is necessary to cover projected Water Marketing Program expenses. The table below shows the recent history of rates set by the authority.

Calendar Year	2018	2019	2020	2021	2022
Variable Rate	\$0.392	\$0.405	\$0.418	\$0.436	\$0.454
% Increase	3.2%	3.2%	3.2%	4.2%	4.2%

*The PWS Committee recommends that the Kansas Water Authority set the CY 2022 Water Marketing variable rate at \$0.454/1000 gallons.*

## Water Marketing Application No. 258

The Director of the Kansas Water Office submits findings to the Kansas Water Authority for review and to decide whether to authorize the Director to enter into contract negotiations with the City of Independence for water supply from Elk City Lake. The Kansas Water Office received a written application on June 3, 2021, accompanied by a request to begin negotiations. The city's source of water is the Verdigris River and the water rights that authorize a water supply intake has access to the natural flows of the Verdigris River. There has been a long history of drought vulnerability when natural flows are limited and flows are being supported by reservoir releases. The proposed contract quantity is for supplemental purposes only and will be released from Elk City Lake, to be re-diverted at the city's existing water supply intake.

In accordance with K.S.A. 82a-1305, which states, in part:

"Whenever the authority finds that a proposed withdrawal and use of water, other than surplus waters, is in the interest of the people of the state of Kansas and will advance the purposes set forth in article 9 of chapter 82a of Kansas Statutes Annotated, and amendments thereto, it shall authorize the director to enter into negotiations for the purpose of entering into written contracts with any person for withdrawal and use within or without the state of waters from conservation storage water supply capacity committed to the state."

As noted in the citation above, before negotiations for a contract can begin, the Kansas Water Authority (KWA) must find:

1. That the proposed sale is in the public interest, and
2. That it will advance the purposes of the State Water Planning Act and the State Water Plan.

If the Kansas Water Authority finds that the request meets these two criteria, it should authorize the Director to begin negotiations with the applicant.

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*The Public Water Supply Committee recommends the Kansas Water Authority approve the Director's request to begin contract negotiations with the City of Independence.*

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#### **Water Marketing Application No. 259 – Renewal of Water Purchase Contract No. 80-1**

The Director of the Kansas Water Office submits findings to the Kansas Water Authority for review and to decide whether to authorize the Director to enter into contract negotiations with the City of Hillsboro for water supply from Marion Reservoir. The Kansas Water Office received a written application on June 4, 2021, accompanied by a request to begin negotiations. The City of Hillsboro currently holds Water Purchase Contract No. 80-1 for water supply from Marion Reservoir, which will expire on December 22, 2021. Article 16 of their current contract provides the purchaser a right of first refusal to enter into a new contract, contingent on the yield availability.

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*The Public Water Supply Committee recommends the Kansas Water Authority approve the Director's request to begin contract negotiations with the City of Hillsboro.*

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**PRELIMINARY FINDINGS  
REQUEST BY CITY OF INDEPENDENCE  
TO PURCHASE WATER  
FROM ELK CITY LAKE FOR WATER SUPPLY PURPOSES  
JUNE 12, 2021**

The Director of the Kansas Water Office submits findings to the Kansas Water Authority for review and to decide whether to authorize the Director to enter into contract negotiations with the City of Independence for water supply from Elk City Lake. The Kansas Water Office received a written application on June 3, 2021, accompanied by a request to begin negotiations.

In accordance with K.S.A. 82a-1305, which states, in part:

"Whenever the authority finds that a proposed withdrawal and use of water, other than surplus waters, is in the interest of the people of the state of Kansas and will advance the purposes set forth in article 9 of chapter 82a of Kansas Statutes Annotated, and amendments thereto, it shall authorize the director to enter into negotiations for the purpose of entering into written contracts with any person for withdrawal and use within or without the state of waters from conservation storage water supply capacity committed to the state."

As noted in the citation above, before negotiations for a contract can begin, the Kansas Water Authority (KWA) must find:

1. That the proposed sale is in the public interest, and
2. That it will advance the purposes of the State Water Planning Act and the State Water Plan.

If the Kansas Water Authority finds that the request meets these two criteria, it should authorize the Director to begin negotiations with the applicant. Figure 1 is a map of Elk City Lake and municipal water service areas.

Figure 1  
Elk City Lake and service areas



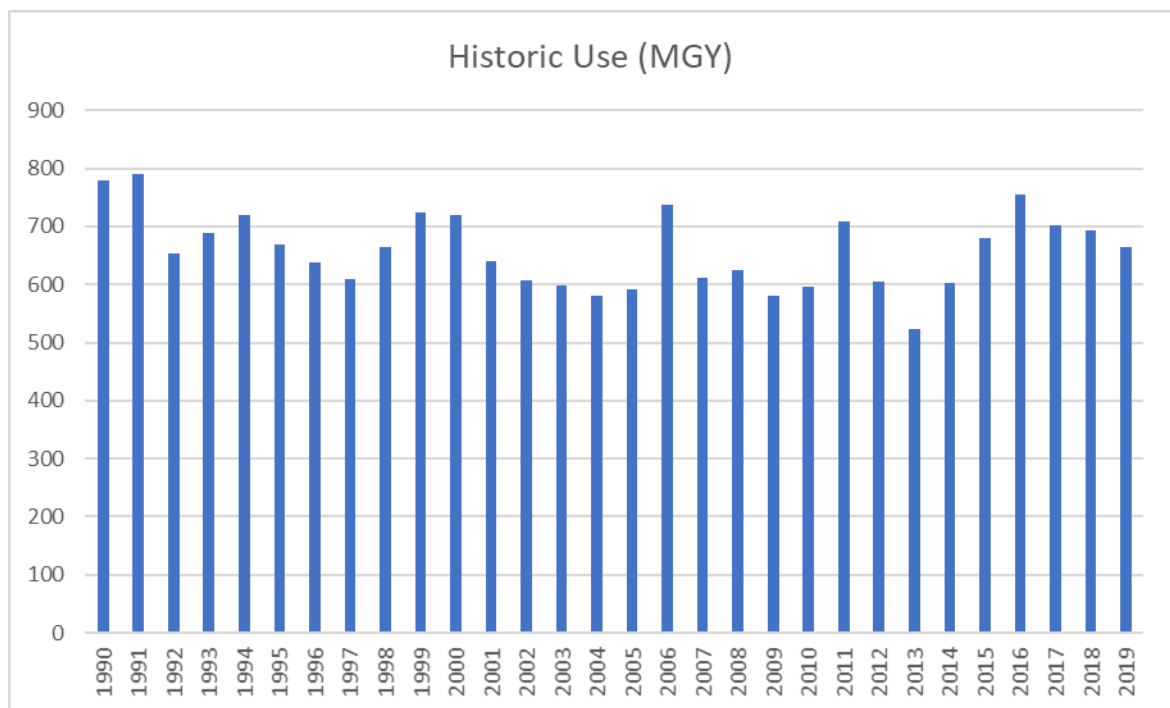
The Kansas Water Authority shall consider the following items in determining whether the proposed contract is in the best interest of the people of the State of Kansas and whether benefits to the State for approving the contract outweigh the benefits to the state for not approving the contract.

**1. The present and future water supply needs of the applicant;**

The applicant's sole source of water are the natural flows of the Verdigris River and water rights held by the city are authorized a sufficient quantity to meet their water supply demand.

Water Right	MGY
MG-004	550
11,401	294.5142
37,162	789.217
Total	844.5142

The chart below shows 30 years of annual water use from the Verdigris River. The water use trend is stable to slightly declining.



In addition to use within the city, Independence also sells water to rural water districts in the area, as follows: Montgomery County, RWD's 1 – 5, and 8.

The intent of the applicant is to decrease their drought vulnerability. A water purchase contract to provide access to water supply storage in Elk City reservoir and supplement their water supply needs when natural flows are insufficient in the Verdigris River. KWO modeling shows that the city may need as much as 150 MG for a 1950's style drought. The city requested modeling for the entire period of record with a demand quantity of less than their water rights authorize. Based on the results the city determined that a quantity of 60 MG should provide an acceptable supplemental supply.

**2. Any current beneficial uses being made of the non-contracted water proposed to be diverted;**

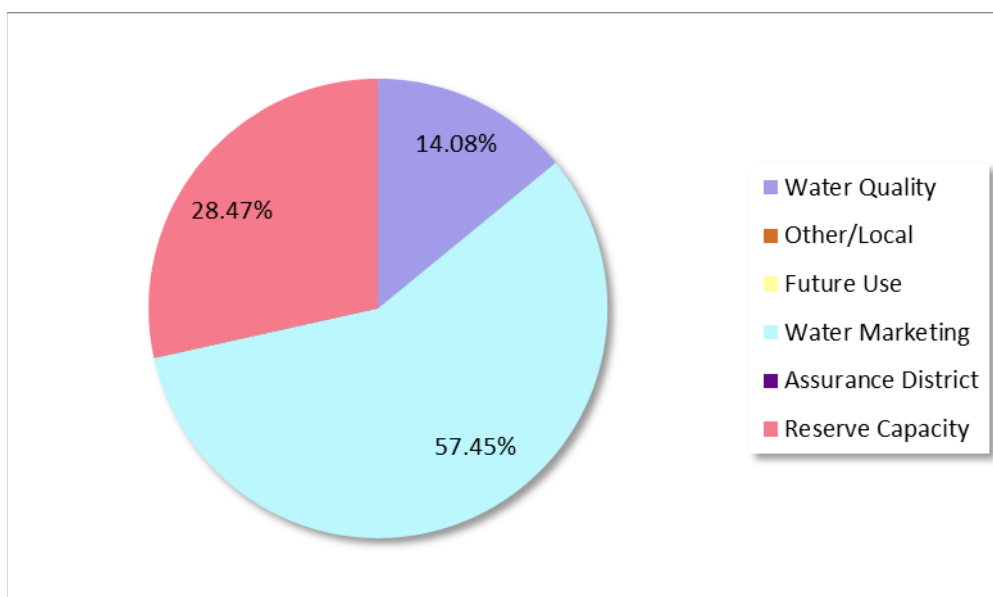
The City of Coffeyville and Coffeyville Resources, have existing contracts for water supply, see table below. The Kansas Water Office's modeling indicates that the Water Marketing storage is more than sufficient to provide adequate yield for current and proposed contract obligations through 2061.

Purchasers, Contract Numbers, and Contract Quantities  
Elk City Lake

Contract Number	Customer Name	Contract End Date	2021 Maximum Gallons	2021 Maximum AF	Annual Contract Maximum Gallons	Annual Contract Maximum AF
81-5	City of Coffeyville	12/16/2023	300,000,000	921	300,000,000	921
99-5	Coffeyville Resources	12/3/2039	608,000,000	1,866	608,000,000	1,866
12-7	Coffeyville Resources	8/9/2051	400,000,000	1,228	400,000,000	1,228
			1,308,000,000	4,015	1,308,000,000	4,015

**3. Any reasonable foreseeable beneficial use of the water;**

As mentioned in the previous section, Water Marketing storage is more than sufficient to meet contractual obligations for water supply. Modeling results show that less than 50% of conservation storage is needed in 40 years, assuming current contract quantities carried forward. Given the surplus of Marketing storage and additional water supply Reserve capacity, Elk City is underutilized.



The reasonable and foreseeable use of the available yield from Elk City Lake is most likely to meet the supplemental water supply needs of the City of Coffeyville, City of Independence, and Coffeyville Resources.

**4. The economic, environmental, public health and welfare, and other benefits or adverse impacts;**

A dependable long-term water supply is essential for the for the local economy, public health, and welfare. No adverse impacts have been identified.



**5. Alternative sources of water available to the applicant;**

No reasonably viable alternative sources have been identified to supplement the city's needs.

**6. The preliminary plan of design construction and operation of any works or facilities used in conjunction with transporting the water to its point of use;**

All diversion works and facilities are existing and long-standing. The natural water courses, the Elk River and Verdigris River will deliver water released from storage to the city's water supply intake on the Verdigris River.

**7. Whether the proposed purchase is consistent with the state water plan approved by the Legislature;**

Nothing in this proposed use of water has been identified that would be inconsistent with the State Water Plan and the State Water Plan Storage Act. The Kansas Water Plan indicates that development of regional solutions and use of existing sources is preferred in water supply development. The city is serving as a valuable regional supplier and this supplemental contract has been a desire of the KWO for many years, a critical step toward reducing institutional drought vulnerability in the region.

**8. The date of the application to contract for withdrawal and use of water;**

Application No. 258 was received by the Kansas Water Office from the City of Independence on June 3, 2021.

**9. Minimum streamflow requirements; and**

The KWO and the Tulsa District of the U.S. Army Corps of Engineers cooperatively operate Elk City Lake and provides a minimum release to the Elk River (see table below). A portion of the conservation storage (14.08%) in Elk City Reservoir is dedicated to serving water quality needs below the reservoir and is used for the minimum release.

**Elk City Reservoir Minimum Release Schedule (cfs)**

Reservoir	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Elk City	5	5	5	5	5	5	5	5	5	5	5	5

While there are no minimum desirable streamflows (MDS) in the Verdigris Basin, target flows (see table below) are specified by the MOA at the Altoona, Fredonia, and Independence gages.

**Verdigris Basin Target Flows (cfs)**

Gage Location	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Altoona	3	3	3	3	5	5	5	5	5	3	3	3
Fredonia	5	5	5	5	5	5	5	5	5	5	5	5
Independence	35	35	35	35	35	35	35	35	35	35	35	35

The use of both water quality storage and water supply storage is necessary to maintain target flows throughout the system, particularly from Elk City Lake.

**10. Whether the applicant has adopted and implemented a water conservation plan;**

The City of Independence has an approved water conservation plan. The plan is consistent with the guidelines of the Kansas Water Office and was approved on March 18, 2009.

Based on these findings, the Kansas Water Office recommends that the Kansas Water Authority authorize the Director to begin negotiations with the City of Independence for the purchase of water from Elk City Lake for municipal water supply purposes.

**PRELIMINARY FINDINGS  
REQUEST BY CITY OF HILLSBORO  
TO PURCHASE WATER  
FROM MARION RESERVOIR FOR WATER SUPPLY PURPOSES  
JUNE 12, 2021**

The Director of the Kansas Water Office submits findings to the Kansas Water Authority for review and to decide whether to authorize the Director to enter into contract negotiations with the City of Hillsboro for water supply from Marion Reservoir. The Kansas Water Office received a written application on June 4, 2021, accompanied by a request to begin negotiations. Hillsboro currently holds Water Purchase Contract No. 80-1 for water supply from Marion Reservoir, which will expire on December 22, 2021. Article 16 of their contract provides the purchaser a right of first refusal to enter into a new contract, contingent on the yield availability.

In accordance with K.S.A. 82a-1305, which states, in part:

"Whenever the authority finds that a proposed withdrawal and use of water, other than surplus waters, is in the interest of the people of the state of Kansas and will advance the purposes set forth in article 9 of chapter 82a of Kansas Statutes Annotated, and amendments thereto, it shall authorize the director to enter into negotiations for the purpose of entering into written contracts with any person for withdrawal and use within or without the state of waters from conservation storage water supply capacity committed to the state."

As noted in the citation above, before negotiations for a contract can begin, the Kansas Water Authority (KWA) must find:

1. That the proposed sale is in the public interest, and
2. That it will advance the purposes of the State Water Planning Act and the State Water Plan.

If the Kansas Water Authority finds that the request meets these two criteria, it should authorize the Director to begin negotiations with the applicant. Figure 1 is a map of Marion Reservoir and municipal water service areas.

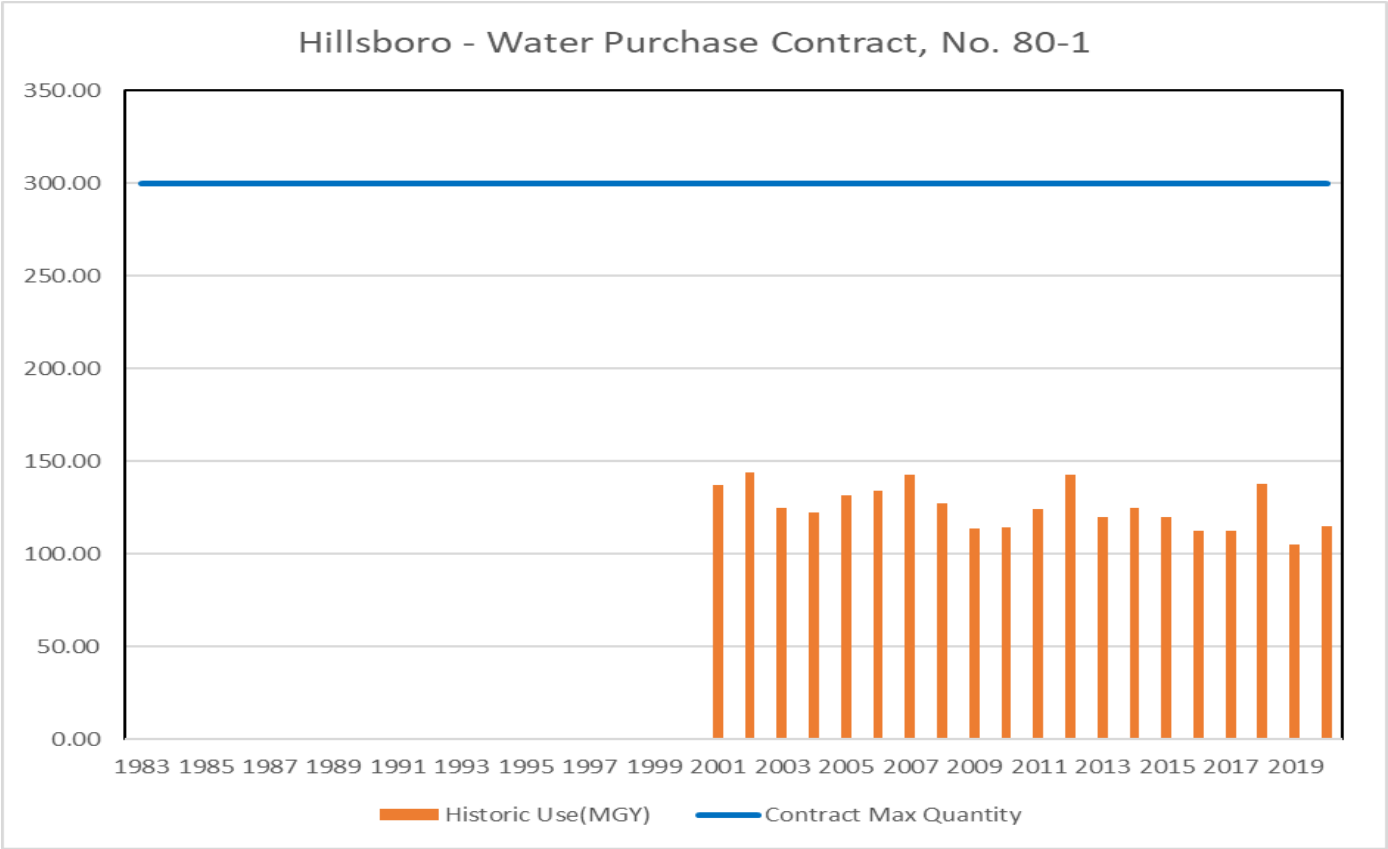


The Kansas Water Authority shall consider the following items in determining whether the proposed contract is in the best interest of the people of the State of Kansas and whether benefits to the State for approving the contract outweigh the benefits to the state for not approving the contract.

**1. The present and future water supply needs of the applicant;**

The applicant is requesting a renewal of the 300 million gallons per year (mg), currently authorized by Water Purchase Contract, No. 80-1. Marion Reservoir has been sole source of water for the city for the past 40 years. The city transitioned from a groundwater source to Marion Reservoir due to water quality problems. The city also treats water for the City of Peabody, under Peabody’s Water Purchase Contract, No. 99-1.

The chart below shows the historic water use under Water Purchase Contract No. 80-1.



There is no indication of population or water use demand increase. The city has not provided any information of future commercial or industrial customers, however, there has been a history of discussions with other water suppliers in the area of using Hillsboro’s water system as more of a regional supplier. Contract negotiations will include exploration of the potential for additional future demands.

**2. Any current beneficial uses being made of the non-contracted water proposed to be diverted;**

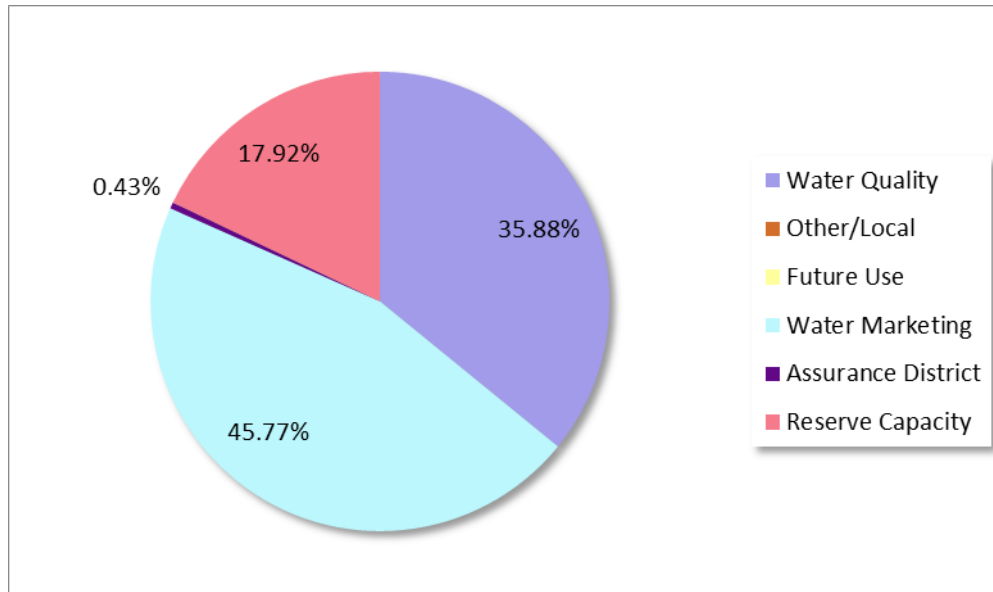
Three public water suppliers, including Hillsboro, have existing contracts for water supply, see table below. The Kansas Water Office’s modeling indicates that the Water Marketing storage is more than sufficient to provide adequate yield for current contract obligations through 2061. The applicant is not proposing to divert additional non-contracted water.

Purchasers, Contract Numbers, and Contract Quantities  
Marion Reservoir

Contract Number	Customer Name	Contract End Date	2021 Maximum Gallons	2021 Maximum AF	Annual Contract Maximum Gallons	Annual Contract Maximum AF
80-1	City of Hillsboro	12/22/2021	300,000,000	921	300,000,000	921
81-4	City of Marion	10/3/2023	237,500,000	729	237,500,000	729
99-1	City of Peabody	4/9/2039	60,000,000	184	60,000,000	184
			597,500,000	1,834	597,500,000	1,834

**3. Any reasonable foreseeable beneficial use of the water;**

As mentioned in the previous section, Water Marketing storage is more than sufficient to meet contractual obligations for water supply. Modeling results show that less than 20% of conservation storage is needed, less than half of the Marketing storage. Given the surplus of Marketing storage and additional water supply Reserve capacity, Marion is underutilized.



It is worth noting that the KWO, over the past few years, has performed modeling scenarios within the Cottonwood/Neosho that make use of Marion water supply to meet downstream demands. Some of the available water supply storage in Marion will be needed to support the water supply needs of Wolf Creek, as the capacity and yield of John Redmond decreases from sedimentation.

**4. The economic, environmental, public health and welfare, and other benefits or adverse impacts;**

A dependable long-term water supply is essential for the for the local economy, public health, and welfare. No adverse impacts have been identified.

**5. Alternative sources of water available to the applicant;**

As mentioned before, the city previously made use of groundwater sources in the area and transitioned to Marion Reservoir due to water quality problems. A rigorous evaluation of alternative water sources does not appear to be appropriate for this existing customer of the Water Marketing Program. Other water utilities in the area include the City of Marion and Marion County RWD No. 4. Hillsboro is

within the geographic boundaries of MN RWD4 but further evaluation of their infrastructure and sources would be needed completed. The City of Marion is also a customer of the Water Marketing Program, with Marion Reservoir as the source. Review of the files at the KWO reveal that the two cities have had discussions about consolidation, however, the most likely utility to serve both cities appear to be Hillsboro.

**6. The preliminary plan of design construction and operation of any works or facilities used in conjunction with transporting the water to its point of use;**

Hillsboro currently has a contract for water supply from Marion Reservoir. The city will use existing facilities to treat and transport water to its customers.

**7. Whether the proposed purchase is consistent with the state water plan approved by the Legislature;**

Nothing in this proposed use of water has been identified that would be inconsistent with the State Water Plan and the State Water Plan Storage Act. The Kansas Water Plan indicates that development of regional solutions and use of existing sources is preferred in water supply development. KWO will be supportive and accommodating if and when the City of Hillsboro and City of Marion chose to pursue consolidation, a regionalization Hillsboro's water utility.

**8. The date of the application to contract for withdrawal and use of water;**

Application No. 259 was received by the Kansas Water Office from the City of Hillsboro on June 4, 2021.

**9. Minimum streamflow requirements; and**

Marion Reservoir will be making minimum releases from a separate sub-pool (Water Quality) within the conservation pool meet the instream flow needs immediately downstream of the reservoir, primarily for aquatic life in the stilling basin. Marion is not responsible for downstream flow of the Cottonwood River. Baseflow gains of the Cottonwood River are normally very healthy.

**10. Whether the applicant has adopted and implemented a water conservation plan;**

The City of Hillsboro has a water conservation plan that was developed as part of the requirements for purchase of water supply from the Water Marketing Program. The plan is consistent with the guidelines of the Kansas Water Office and was approved on May 9, 2013.

Based on these findings, the Kansas Water Office recommends that the Kansas Water Authority authorize the Director to begin negotiations with the City of Hillsboro for the purchase of water from Marion Reservoir for municipal water supply purposes.